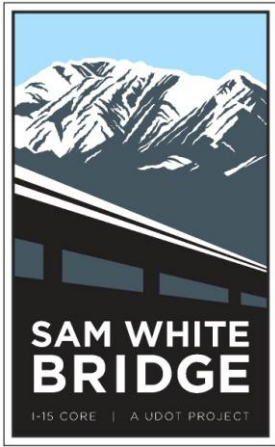


# I-15 CORE Design-Builder Perspective Provo River Constructors (PRC)

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Hugh Boyle, S.E.; Structures Design Manager



# Project Team

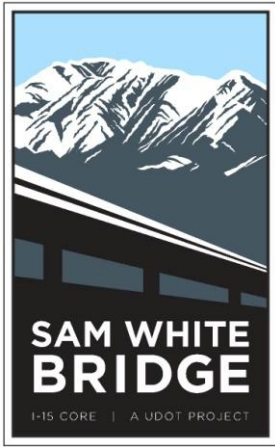
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## Provo River Constructors Joint Venture

- Fluor
- Ames Construction, Inc.
- Wadsworth Brother Inc.
- Ralph L. Wadsworth Inc.

## Design Team

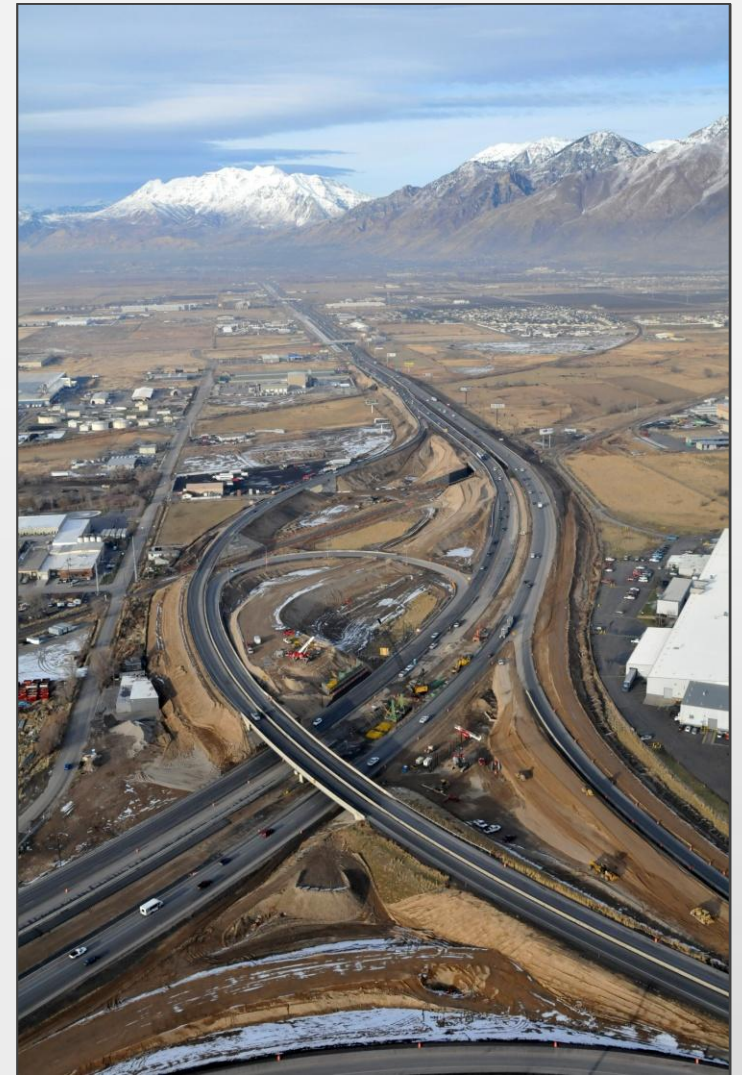
- HDR Inc. (Prime)
- Jacobs
- Michael Baker Jr. Inc
- Kleinfelder

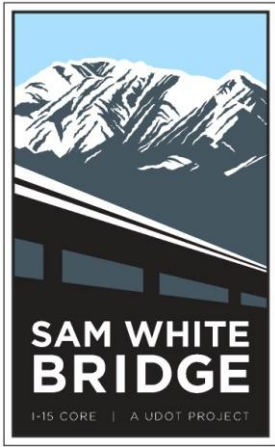


# Project Scope

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- Reconstruct/widen 23 miles of I-15
  - New bridges
  - Permanent and temporary widenings
  - Sign structures and retaining walls





# Bid Requirements

- Fixed Price – Best Value
- PRC primary goals
  - Provide required scope
  - Maintain capacity during construction





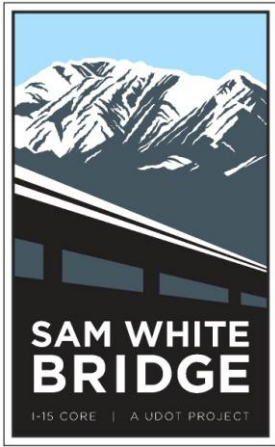


# Why ABC?

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- UDOT CORE team value elements
  - Meet scope in primary project limits
  - Maintain existing number of lanes – MOT
  - Minimize impacts from bridge construction - ABC





# Why ABC?

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- Determine bridge locations that add project value
  - Proctor Lane
  - Sam White Lane
  - 200 South
  - Provo Center Street





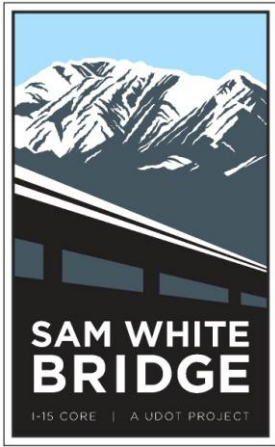


# Why ABC?

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- Determine user impact savings
  - 44 single direction interstate closures reduced to 3
  - 100 day reduction in local road closure time





# ABC Bid Issues

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- Staging area locations
- Temporary supports
- Heavy lifter requirements and limitations



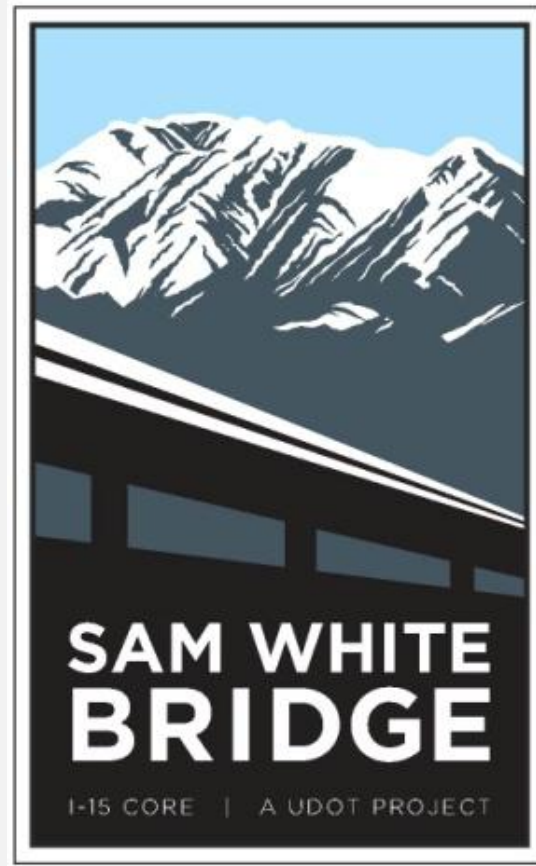




# Presentation Outline

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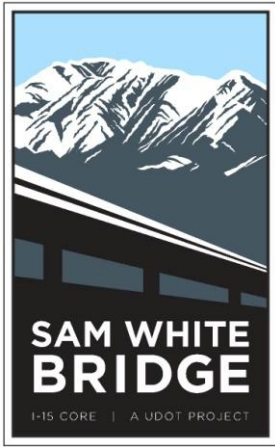
- Pre-bid contractor issues – Wayne Bowden (PRC, RLW)
- Proctor Lane – Jeff Dobmeier (Jacobs)
- 200 South – Richard Hansen (Baker)
- Sam White Lane – Richard Hansen (Baker)
- Provo Center Street – Cory Imhoff and Boyd Wheeler (HDR)
- Contractor perspective – Bryce Jaynes (PRC, RLW)
- Heavy lift contractor perspective – Steve Bone (Sarens)



# I-15 CORE Design-Builder Perspective Provo River Constructors (PRC)

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Wayne Bowden; Area Manager



# Planning and Selection Process

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- ABC method selection
- Location selection
- Utility conflict identification
- Contractor selection





# ABC Method Selection



CONSTRUCT OFF-SITE Efficiencies in constructing multiple structures in an off-site location.

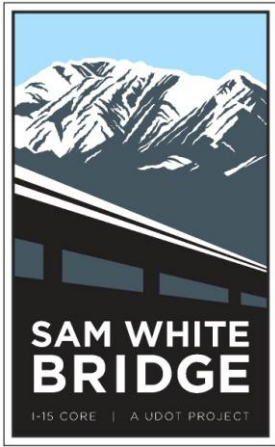




# ABC Method Selection



LAUNCH Two-span bridges can be constructed on each side of the freeway and are launched to the center bent using slide rails in one or two nights.



# ABC Method Selection



SLIDE Mainline bridges can be constructed next to the permanent location. In a one-night closure, the existing bridge is removed and the new bridge is slid in; transition is then paved for traffic.



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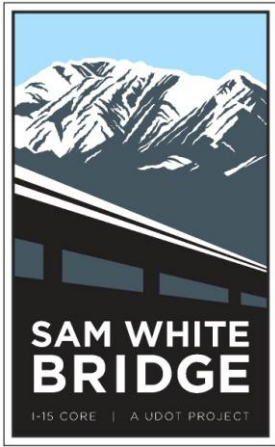


# ABC Method Selection

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# ABC Method Selection

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CLIMBING JACKS Bridges can be raised or lowered from 0" to 20' plus depending on elevation needs.



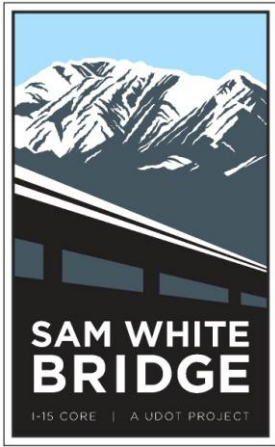


# ABC Method Selection

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CLIMBING JACKS Bridges can be raised or lowered from 0" to 20' plus depending on elevation needs.



# ABC Method Selection

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PRECAST PARTIAL DEPTH PANELS In lieu of cast-in-place decks, the precast panels eliminate the need for forming materials underneath and reducing lane restrictions. This, in turn, accelerates the schedule.





# Location Selection



LOCATION The General Contractor must first determine a location and the method as discussed and assure the proximity, grading elevations, and access are adequate to construct the superstructure off the corridor.

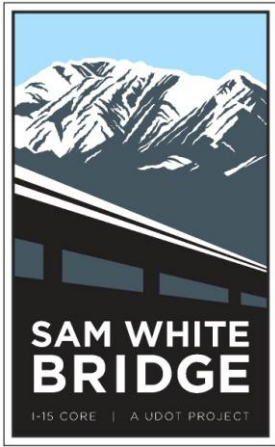




# Utility Conflict Identification

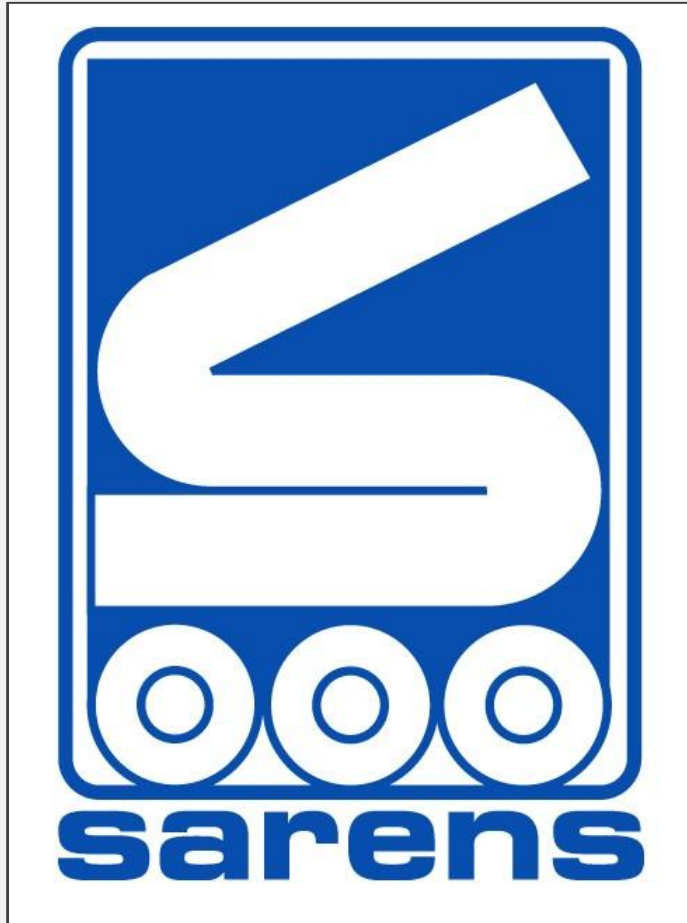


**UTILITY CONFLICT IDENTIFICATION** Utilities can be detrimental to the success of the bridge moves. It is imperative to find a location with limited utility conflicts to avoid conflicts during the moving and constructing process.



# Contractor Selection

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CONTRACTOR SELECTION Upon completion of the previous items, the General Contractor will define a scope, time frame and method and send out to bid.